

WHAT IS CLAIMED IS:

1 1. A method for selecting a resource from a plurality of potential
2 resources for providing a service in response to a service request, the method comprising the
3 steps of:

4 determining aging services by estimating which of the potential services are
5 likely to be disconnected;

6 disconnecting one of the aging services from its associated resource; and

7 using the disconnected resource for providing the service in the service
8 request.

1 2. The method of claim 1, wherein the aging service selected to be
2 disconnected is an oldest service for which the potential disconnect is most likely to occur.

1 3. The method of claim 2, wherein the oldest service is determined by
2 non-responsiveness to a transmitted query.

1 4. The method of claim 2, wherein the service request is generated in
2 accordance with an Internet Group Management Protocol.

1 5. The method of claim 4, wherein the oldest service is determined by
2 non-responsiveness to a General Query.

1 6. The method of claim 4, wherein the oldest service is determined by
2 non-responsiveness to Group Specific Query.

1 7. The method of claim 1, wherein the resource is a virtual circuit.

1 8. The method of claim 1, wherein the resource is bandwidth.

1 9. A method for selecting a resource from a plurality of potential
2 resources for providing a service in response to a service request, the method comprising the
3 steps of:

4 determining aging services by estimating which of the potential services are
5 likely to be disconnected;

6 if one of the aging resources is used for providing the service in the service
7 request, stopping the aging of the resource and using it for providing the service in the service
8 request; and
9 if none of the aging resources are used for providing the service in the service
10 request,
11 disconnecting one of the aging services from its associated resource,
12 and
13 using the disconnected resource for providing the service in the service
14 request.